

Amendments to the Claims

I. Amendments

Please amend the claims as indicated below.

II. The Claims of the Application

Claim 1. **[Currently Amended]** A ~~homogeneous polyoxime~~ composition of homogeneous polyoxime molecules attached to a solid phase, ~~in which~~ wherein said polyoxime molecules ~~present in said composition~~ comprise a polypeptide baseplate organic molecule~~[[,]]~~ said baseplate organic molecule being a polypeptide having an amino and a carboxyl terminus and bonded to at least two second organic molecules, wherein said ~~baseplate organic molecule is linked to at least two~~ second organic molecules~~[[,]]~~ ~~which~~ may be the same or different from one another, and wherein the each bond linkages between said baseplate organic molecule and any of said at least two second organic molecules being is an oxime bond, linkages said oxime bond linking such second organic molecule and a side chain of an amino acid of said polypeptide baseplate organic molecule, said oxime bond being formed by reaction of an orthogonal reactive group on each said second organic molecule, said orthogonal reactive group being a keto group, an aldehyde group, or an amino-oxy group, with a complementary orthogonal reactive group on said polypeptide baseplate organic molecule.

Claims 2-19. **[Cancelled]**

Claim 20. **[Previously Presented]** The polyoxime composition of claim 1, wherein at least one of said complementary orthogonal reactive group on said baseplate organic molecule comprises an aldehyde or an amino-oxy group.

- Claim 21. **[Previously Presented]** The polyoxime composition of claim 20, wherein all of said complementary orthogonal reactive group on said baseplate organic molecule comprise an aldehyde or an amino-oxy group.
- Claim 22. **[Currently Amended]** ~~The A polyoxime~~ composition of ~~claim 1~~[[,]] homogeneous polyoxime molecules attached to a solid phase, wherein said polyoxime comprise a polypeptide baseplate organic molecule bonded to at least two second organic molecules, wherein said second organic molecules may be the same or different from one another, and wherein each bond between said baseplate organic molecule and any of said second organic molecules is an oxime bond formed by reaction of an orthogonal reactive group on said second organic molecule, said orthogonal reactive group being a keto group, an aldehyde group, or an amino-oxy group, with a complementary orthogonal reactive group on said polypeptide baseplate organic molecule, wherein an orthogonal reactive group of at least one of said second organic molecules comprises amino-oxy-acetyl.
- Claim 23. **[Previously Presented]** The polyoxime composition of claim 22, wherein said orthogonal reactive group of all of said second organic molecules comprise amino-oxy.
- Claim 24. **[Previously Presented]** The polyoxime composition of claim 1, in which all of said second organic molecules linked to said baseplate organic molecule are the same.
- Claim 25. **[Previously Presented]** The polyoxime composition of claim 24, wherein each oxime linkage is in the same orientation.

- Claim 26. **[Previously Presented]** The polyoxime composition of claim 24, wherein at least one orthogonal reactive group present on said baseplate molecule comprises an aldehyde group.
- Claim 27. **[Previously Presented]** The polyoxime composition of claim 26, wherein a complementary orthogonal reactive group of at least one of said second organic molecules is an amino-oxy group.
- Claim 28. **[Previously Presented]** The polyoxime composition of claim 1, in which at least one of said second organic molecules linked to said baseplate organic molecule is different from another second organic molecule linked to said baseplate organic molecule.
- Claim 29. **[Previously Presented]** The polyoxime composition of claim 28, wherein each oxime linkage is in the same orientation.
- Claim 30. **[Previously Presented]** The polyoxime composition of claim 28, wherein at least one orthogonal reactive group present on the baseplate organic molecule comprises an aldehyde group.
- Claim 31. **[Previously Presented]** The polyoxime composition of claim 30, wherein a complementary orthogonal reactive group of at least one of said second organic molecules is an amino-oxy group.
- Claim 32. **[Previously Presented]** The polyoxime composition of any of claims 1, 24 or 28, further comprising at least one third molecule linked to said baseplate organic molecule, said third molecule being selected from the group consisting of a therapeutic agent, a metal chelating agent, a detectable marker, an imaging agent, and a lipophilic anchor.

- Claim 33. **[Previously Presented]** The polyoxime composition of claim 32, wherein at least one of said third molecules is an imaging agent or a detectable marker.
- Claim 34. **[Previously Presented]** The polyoxime composition of claim 32, wherein said polyoxime is immunogenic.
- Claim 35. **[Previously Presented]** A pharmaceutical composition, comprising the polyoxime composition of any of claims 1, 24 or 28 and a pharmaceutically acceptable carrier.
- Claim 36. **[Previously Presented]** The polyoxime composition of claim 1, wherein at least one of said second organic molecules comprises a peptide.
- Claim 37. **[Previously Presented]** The polyoxime composition of claim 1, wherein at least one of said second organic molecules comprises a lipid.
- Claim 38. **[Previously Presented]** The polyoxime composition of claim 1, wherein at least one of said second organic molecules comprises an oligosaccharide.
- Claim 39. **[Previously Presented]** The polyoxime composition of claim 1, wherein at least one of said second organic molecules comprises a polyethylene glycol.
- Claim 40. **[Previously Presented]** The polyoxime composition of claim 1, wherein said solid phase is selected from the group consisting of a silicon chip, a tissue culture plate, a synthetic resin, a natural resin, a lipid layer, and a cell membrane.
- Claim 41. **[Previously Presented]** The polyoxime composition of claim 1, wherein said solid phase is attached to said baseplate organic molecule.

- Claim 42. **[Previously Presented]** The polyoxime composition of claim 1, wherein said solid phase is attached to at least one of said second organic molecules.
- Claim 43. **[Previously Presented]** The polyoxime composition of any of claims 41 and 42, wherein said solid phase is attached to said baseplate organic molecule, or at least one of said second organic molecules, through a bond selected from the group consisting of oxime, thioether and thioester.
- Claim 44. **[Currently Amended]** A composition comprising an amino-oxy peptide baseplate attached to a solid phase through a bond selected from the group consisting of oxime, thioether and thioester, said amino-oxy peptide baseplate comprising a peptide having an amino and a carboxyl terminus and comprising ~~one~~ two or more amino acids having a side chain modified with a protected or unprotected amino-oxy group.
- Claim 45. **[Currently Amended]** A composition comprising a peptide baseplate attached to a solid phase through a bond selected from the group consisting of oxime, thioether and thioester, said peptide baseplate comprising a peptide having an amino and a carboxyl terminus and comprising ~~one~~ two or more amino acids having a side chain attached through an oxime bond to a complementary orthogonal specifically active molecule.